

# AN ALTERNATOR EQUIPPED WITH IMPROVED INTERFACE MEANS BETWEEN AN ENGINE CONTROL APPARATUS AND ITS REGULATOR CIRCUIT, AND A CORRESPONDING INTERFACE

## ABSTRACT OF THE DISCLOSURE

5 A motor vehicle alternator includes a regulator for varying excitation as a function of a reference variable, together with a conversion circuit for varying the reference variable (such as a voltage) according to a PWM signal. It includes, in combination: an internal clock with a controlled variable period; a difference circuit which produces a difference signal between the period of the PWM signal and that of a signal from the clock; a control circuit which governs the internal clock in response to the difference signal in such a way as to equalise the periods of the internal clock signal and the PWM signal; and a conversion circuit which comprises a counter paced by the clock and active while the PWM signal is at a given logic level, together with a D/A converter for converting the count from the counter into a voltage from which the regulator reference voltage is obtained.

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